

Deneva 2 C Series Storage Solutions



Deneva 2 SATA 3.0 Solid State Drives – 2.5" SLC

C Series at a Glance

- Leading-edge SATA 6Gb/s storage solution designed to dramatically increase productivity & application performance
- Cost-effective SLC-based design with best-in-class endurance & reliability

Raising the Bar in Performance

- Nearly double the speed of the previous generation
- Delivers the performance of hundreds of hard disk drives in a single server
 - Over 500MB/s of throughput
 - Up to 80,000 4K random write IOPS

Reliable, Longer-Lasting, & Secure

- Data fail recovery ensures superior reliability
- Maximized product lifespan with write amplification as low as 0.3
- Intelligent block management & wear-leveling for increased endurance
- Advanced security with 256-bit AES encryption support
- Strong error correction for enhanced data integrity

Flexible Design with a Wide Array of Configurations

- Deneva 2 comes in an industry-standard 2.5" model; however, its unique architecture can be tailored to fit specific applications

Cost-Savings that Other SSD Lines Cannot Deliver

- Alternative flash options provide a greater spectrum of price per IOPS
- Support for next generation NAND flash geometries

KEY DIFFERENTIATORS:

- Highest performing SSD in its class
- Ultra-high endurance for enterprise applications (increases drive life by up to 5x the rated P/E cycles of the NAND flash)
- Unique ability to customize form factor, functionality (i.e. firmware), & components
- Robust feature-set including enterprise-class ECC, data reliability, and data path parity protection

OCZ Deneva 2 SSDs are designed and manufactured to solve today's enterprise storage challenges and address the limitations hard drive technology imposes on IT infrastructures. The Deneva 2 Series delivers the industry's best performance while meeting the stringent reliability, security, and economical needs of enterprise storage environments including cloud storage, web-serving, and data warehousing. Providing a lucrative option for datacenters, Deneva 2 maximizes IOPS per dollar enabling increased data throughput with lower power consumption and a smaller operating footprint.

enterprise

**PHYSICAL**

| | |
|---------------------------|---|
| Usable Capacities (IDEMA) | 30GB ~ 120GB |
| NAND Components | Toggle-Mode Single-Level Cell (SLC) |
| Interface | Serial ATA (SATA) 6Gb/s |
| Form Factor | 2.5 inch |
| NAND Controller | SandForce® 2281 |
| Dimensions (L x W x H) | 99.7 x 69.75 x 9.2 mm |
| Weight | 88g (may vary slightly due to capacity) |

PERFORMANCE

| | |
|-------------------------------|-------------------|
| Max Read | up to 550 MB/s |
| Max Write | up to 520 MB/s |
| Random Read Operations (4kB) | up to 55,000 IOPS |
| Random Write Operations (4kB) | up to 80,000 IOPS |

ENVIRONMENTAL

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|-----------------------|----------------------------------|
| Power Consumption | Idle: 1.65 Watts Active: 3 Watts |
| Ambient Temperature | 0°C ~ 55°C |
| Operating Temperature | 0°C ~ 70°C |
| Storage Temperature | -45°C ~ 85°C |
| Certifications | RoHS, CE, FCC |

RELIABILITY/SECURITY

| | |
|---------------------------|---|
| MTBF | 2 million hours |
| Data Fail Recovery | Recovers data from up to one NAND flash block (available on 120GB and up) |
| Data Path Protection | ECC: Up to 55 bits correctable per 512-byte sector |
| Data Reliability | Read unrecoverable bit error rate (UBER) 10e-16 |
| Data Encryption | 128-bit & 256-bit AES-compliant |
| Product Health Monitoring | Self-Monitoring, Analysis and Reporting Technology (SMART) Support |

COMPATIBILITY

| | |
|--------------------|---|
| Serial ATA | Fully compliant with Serial ATA International Organization: Serial ATA Revision 3.0. Fully compliant with ATA/ATAPI-8 Standard Native Command Queuing (NCQ) |
| Operating System | Windows XP 32-bit / 64-bit; Windows Vista 32-bit / 64-bit; Windows 7 32-bit / 64-bit; Linux; Mac OS X |
| Power Requirements | Standard SATA Power Connector |

ADDITIONAL FEATURES

| | |
|--------------------------|--|
| Performance Optimization | TRIM (requires OS support) |
| Service & Support | 3-Year Warranty; Dedicated FAE/FSE support (includes PM/engineer support through validation cycle) |

PRODUCT**CAPACITY****ORDERING**

| NAME | TYPE | RAW | IDEMA | WRITE ENDURANCE* | PART NUMBER | UPC |
|----------|----------|-------|-------|------------------|-------------------|--------------|
| Deneva 2 | 2.5" SLC | 32GB | 30GB | Up to 15PB | D2CSTK251S14-0030 | 842024029045 |
| Deneva 2 | 2.5" SLC | 64GB | 60GB | Up to 30PB | D2CSTK251S14-0060 | 842024027522 |
| Deneva 2 | 2.5" SLC | 128GB | 120GB | Up to 60PB | D2CSTK251S14-0120 | 842024027515 |